

REMARKS

In the Non-Final Office Action mailed on March 25, 2004 (Paper No. 4), the Examiner: allowed claims 1-7; indicated that claims 40-56 would be allowable if rewritten or amended to overcome the 35 U.S.C. § 101 rejections; objected to claims 29, 30, 39, 45, 52, 56, 60 and 61; and rejected claims 8-39 and 57-61 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,662,357 to Bowman-Amuah ("Bowman-Amuah"). In this response, Applicant cancels claim 58, and amend claims 57 and 59 to more particularly point out and distinctly claim Applicant's invention. Support for the claim amendments are provided throughout the specification. The claim amendments add no new matter. Claims 1-61 are presently pending, of which claim 58 is canceled. Applicant respectfully traverses the Examiner's rejections. Further examination and review in view of the amendments and remarks below are respectfully requested.

Applicant is grateful to the Examiner for allowing claims 1-7 and indicating that claims 40-56 are allowable over the prior art.

Applicant's Techniques

Applicant's techniques are directed to creating a data model by combining inter-related model segments. Model segments contain model elements, each having a structure, and relationships between the model elements. For example, to create an inter-relationship between model segments, a model segment can include one or more non-external model elements and one or more references to external model elements, and relationships between the external model elements and other non-external model elements. An external model element of a model segment is an actual model element whose definition or description is located in another model segment. The inter-related model segments can then be combined by replacing the references to the external model elements with their corresponding actual model element definitions to create a data model.

In some cases, a relationship in a model segment between model elements includes a description or definition of how the structure and/or properties of one or both

of the model elements may be altered by the relationship. For example, if a relationship indicates a change (e.g., alteration) in the structure of an external model element, the structure of the actual model element will be changed in the indicated fashion after replacing the reference to the external model element with the actual model element definition.

Bowman-Amuah

Bowman-Amuah describes a development environment framework for understanding the requirements of a development environment whose purpose is to support the tasks involved in the analysis, design, construction and maintenance of business systems. In the described framework, common information that is used by various components of the framework is allowed to be accessed in a single, shared repository.

I. Claim Objections

In the Office Action, the Examiner stated:

Independent claims 6-16 are objected to because of the following informalities:

Claims 29-30, 39, 45, 52, 56 and 60-61 need to be rewritten to include the missing elements of the claims they incorporate. For example, claims 29 and 30 should be rewritten to include the elements of claim 25 as stated in the claim. Claim 39 should be rewritten to include the elements of claim 35. Claim 45 should be rewritten to include the elements of claim 40. Claim 52 should be rewritten to include the elements of claim 46. etc. Appropriate correction is required.

Applicant is unclear as to the Examiner's objection to claims 6-16 and, in particular the relationship to claims 29-30, 39, 45, 52, 56 and 60-61 which could serve as a basis for the objection. If the Examiner elects to maintain these objections, Applicants respectfully request that the Examiner clearly identify the claims that are being objected to, and provide a basis for the objections.

With reference to claims 29, 30, 60 and 61, Applicant submits that each claim is a dependent claim that further limits a feature recited in its preceding claim, as

permitted by 37 C.F.R. § 1.75(c). With reference to claims 39, 45, 52 and 56, Applicant submits that each claim is a computer-readable medium claim, and this type of claim has been permitted by the Patent and Trademark Office (See e.g., claims 42 and 49 of U.S. Patent No. 6,137,492).

II. Rejections under 35 U.S.C. § 101

The Examiner rejected claims 8-24 and 35-56 under 35 U.S.C. § 101 as being directed to a non-statutory subject matter, specifically, directed towards a data structure. Applicant respectfully disagrees.

Claims 8-24 and 35-56 are not directed towards a data structure as indicated by the Examiner, but are directed to a method for creating a model in a data structure. In particular, and as recited by the claims, claims 8-24 are directed to a "method for assembling a complete model;" claims 35-39 are directed to a "method for creating one of multiple model segments;" claims 40-45 and 53-56 are directed to a "method for creating a complete model;" and claims 46-52 are directed to a "method for assembling a complete model." Applicant respectfully submits that a method for creating a model is statutory subject matter under 35 U.S.C. § 101.

III. Rejections under 35 U.S.C. § 102

The Examiner rejected claims 8-39 and 57-61 under 35 U.S.C. § 102(e) as being anticipated by Bowman-Amuah. Applicant respectfully traverses this rejection. All of the claims, including claim 57, as amended, include the common feature of an indication or a description of a relationship between a non-external model element and an external model element that represents an alteration of at least one of the structures associated with the model elements.

In rejecting claims 8-34, the Examiner indicated that the discussion of a need for a dedicated data modeling tool as disclosed in Bowman-Amuah (col. 75, line 24, to col. 76, line 67) corresponds to the provision of an indication of a relationship between the first and second model elements that represents an alteration of at least one of the first and second structures.

Applicant respectfully disagrees. The cited reference of Bowman-Amuah is a general discussion of the need for a dedicated data modeling tool and the implementation consideration for the data modeling tool. The cited reference of Bowman-Amuah makes mere mention of what data models are (col. 75, lines 29-30 and 38-41), the requirements of good data modeling (col. 75, lines 49-50), and a use for a finalized data model (col. 75, lines 58-59), but fail to disclose any details or specifics of the data model, as evidenced by col. 75, lines 42-45, which recite, "as a simplified representation of reality, it [a data model] has no regard for such physical matters as how data is to be retrieved or how long it will take." Thus, Applicant respectfully submits that the Examiner has failed to identify how Bowman-Amuah either discloses, suggests or teaches an indication of a relationship between a non-external model element and an external model element that represents an alteration of at least one of the structures associated with the model elements. Likewise, Applicant can find in Bowman-Amuah no such disclosure, suggestion or teaching.

In rejecting claims 35-39, the Examiner indicated that the summary of the benefits of object classes as disclosed in Bowman-Amuah (col. 5, line 53, to col. 6, line 67) corresponds to the provision of an indication of a relationship between the first and second model elements that represents an alteration of at least one of the first and second structures.

Applicant respectfully disagrees. Bowman-Amuah does not disclose, suggest or teach an indication of a relationship between the first and second model elements that represents an alteration of at least one of the first and second structures. To the contrary, the cited reference of Bowman-Amuah is a discussion of the benefits of object oriented programming principles and object classes in object oriented programming. According to the cited reference, "encapsulation enforces data abstraction through the organization of data into small, independent objects that can communicate with each other" and "subclassing and inheritance make it possible to extend and modify objects through deriving new kinds of objects from the standard classes available in the system." (col. 5, lines 58-67). Even though new kinds of objects can be derived from standard classes of objects, there is no relationship between the first and second model elements (e.g., relationship between two standard classes of objects) that represents an

alteration of at least one of the first and second structures. To the contrary, in Bowman-Amuah, a new object is derived from a single standard class, without a relationship that represents an alteration of the single standard class. Thus, Bowman-Amuah fails to disclose, suggest or teach an indication of a relationship between a non-external model element and an external model element that represents an alteration of at least one of the structures associated with the model elements.

With regard to claims 57-61, while Applicant regards claim 57 to be patentable over Bowman-Amuah in its present form, Applicant amends claim 57 to explicitly recite "a description of a relationship between a described model element and a reference to another model element that represents an alteration of at least one of the first and second structures." As discussed above, Bowman-Amuah fails to disclose, suggest or teach a description of a relationship between a non-external model element and an external model element that represents an alteration of at least one of the structures associated with the model elements. Applicant submits that claims 57 and 59-61, as amended, are unarguably patentable over Bowman-Amuah.

IV. Conclusion

In view of the foregoing, Applicant respectfully submits that claims 1-57 and 59-61 are allowable and ask that this application be passed to allowance. If the Examiner has any questions or believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged to telephone the undersigned at (206) 359-8000.

Respectfully submitted,

Perkins Coie LLP



Do Te Kim

Registration No. 46,231

Date: 7/23/04

Correspondence Address:

Customer No. 25096

Perkins Coie LLP

P.O. Box 1247

Seattle, Washington 98111-1247

(206) 359-8000